

**Work Order ID 64587**

Wednesday, December 08, 2010 11:23:37 A

Page 1

Item ID: D350-591-133

Accept

Setup Start

Revision ID:

Stop

Item Name: Aft Maintenance Step

Start Date: 12/8/2010 Start Qty: 4.00

Required Date: 12/14/2010 Req'd Qty: 4.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: MCDate: 10-12-22

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr

Revision Nbr

D2946

Rev B

100

0.00



DC

Document Control

DOCUMENT CONTROL

Memo

Photocopy bluefile and type labels as per PPP D350-591-133 CHG003

0.00

110

0.00



Large Fab

Large Fab

Large Fab

Memo

1-Cut D2622-120 extrusion to 62.06" long as per Dwg D2946

0.00

2-Deburr

\*\*Ensure that 57.09" minimum extrusion is kept and identify to be used for  
D350-591-215/-216.\*\*

ASAP



S 10/12/22

\* for BG 10-12-22 (4)

R 10.12.10

4 P

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
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| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

**Work Order ID 64587**

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Item ID: D350-591-133

Accept

Setup Start

Revision ID:

Stop

Item Name: Aft Maintenance Step

Start Date: 12/8/2010 Start Qty: 4.00

Required Date: 12/14/2010 Req'd Qty: 4.00

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

150

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

160

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

170

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

**Work Order ID 64587**

Wednesday, December 08, 2010 11:23:37 A

Page 4

Item ID: D350-591-133

Accept

Revision ID:

Item Name: Aft Maintenance Step

Start Date: 12/8/2010 Start Qty: 4.00

Required Date: 12/14/2010 Req'd Qty: 4.00

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

Stop

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

180



Large Fab

Large Fab

Memo

0.00

0.00

Remove alodine prior to welding. Weld end cap as per Dwg D2946. Grind end cap weld flush.

A/R AL ROD BATCH: M108436BE 10.12.164Ø

190



QC

Quality Control

QC9- Inspect visual per QSI004- Fusion Welds

Memo

0.00

0.00

4ØBE 10/12/20

200



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

BE 10/12/20(74)

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
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| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



# Work Order ID 64587



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Wednesday, December 08, 2010 11:23:37 A

Item ID: D350-591-133

Accept



Setup Start



Revision ID:

Item Name: Aft Maintenance Step

Stop



Start Date: 12/8/2010 Start Qty: 4.00

Cust Item ID:

Required Date: 12/14/2010 Req'd Qty: 4.00

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

210

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

41 10/12/20

4

8

220

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

M115951

Memo

0.00

Powder Coating

START TIME: 3:30  
OVEN TEMPERATURE: 320°  
FINISH TIME: 4:00

4. BL10-1220.

230

Wing Walk as per dwg QSI005 4.4 Batch

0.00



HandFinish

Memo

0.00

Hand Finishing

M445790 41 10/12/21

4

0

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

**Work Order ID 64587**

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Wednesday, December 08, 2010 11:23:37 A

Item ID: D350-591-133

Accept



Setup Start



Revision ID:

Stop



Item Name: Aft Maintenance Step

Start Date: 12/8/2010 Start Qty: 4.00



Cust Item ID:

Required Date: 12/14/2010 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

240

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

8/10/12/22



250

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

10/12/22 42

260

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

Sant 22



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

**Work Order ID 64587**

Wednesday, December 08, 2010 11:23:37 A

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Item ID: D350-591-133

Accept



Setup Start



Revision ID:

Item Name: Aft Maintenance Step

Stop



Start Date: 12/8/2010 Start Qty: 4.00



Cust Item ID:

Required Date: 12/14/2010 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



| Sequence ID/<br>Work Center ID | Operation<br>Description                             | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 270                            |  | 0.00                 |         |        |              |               |               |                  |                |
|                                | Packaging  |                      |         |        |              |               |               |                  |                |
| Packaging                      | Memo   | 0.00                 |         |        |              |               |               |                  |                |
| Packaging                      | Identify and pack for shipping as per PPD350-591-133 |                      |         |        |              |               |               |                  |                |
|                                | Location: <u>61</u>                                  |                      |         |        |              |               |               |                  |                |
|                                | PPP Rev: <u>D</u>                                    |                      |         |        |              |               |               |                  |                |
| 280                            |  | 0.00                 |         |        |              |               |               |                  |                |
|                                | QC21- Final Inspection - Work Order Release          |                      |         |        |              |               |               |                  |                |
| QC                             | Memo   | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |  |                      |         |        |              |               |               |                  |                |

66/12/22 (4)

10/12/22 (J)

C210112122

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
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| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

Wednesday, December 08, 2010 11:23:41 AM

Page 1

Work Order ID: 64587

Parent Item: D350-591-133

Parent Item Name: Aft Maintenance Step

Start Date: 12/8/2010


Required Date: 12/14/2010

Start Qty: 4.00


Required Qty: 4.00

Comments: IPP Rev:B□05.10.14□Modified step 10□KJ/EC  
IPP Rev:B□06.07.19□D2946 @ rev.b EC


| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|

|   |  |              |    |  |  |     |      |         |      |      |  |                    |  |
|---|--|--------------|----|--|--|-----|------|---------|------|------|--|--------------------|--|
| D2622-120C<br><br>Step Extrusion |  | Manufactured | No |  |  | 110 | Each | 43.7800 | 0.52 | 2.08 |  | <i>12.10.12.13</i> |  |
|---|--|--------------|----|--|--|-----|------|---------|------|------|--|--------------------|--|

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| WA       | 43.78   |          |
| 55214    | 3.42    |          |
| 58544    | 1       |          |
| 61208    | 39.36   |          |

|  |  |              |    |  |  |     |      |         |   |   |  |                    |  |
|--|--|--------------|----|--|--|-----|------|---------|---|---|--|--------------------|--|
| D2734<br><br>Step End Plate |  | Manufactured | No |  |  | 130 | Each | 60.0000 | 2 | 8 |  | <i>12.10.12.13</i> |  |
|--|--|--------------|----|--|--|-----|------|---------|---|---|--|--------------------|--|

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| WA       | 60      |          |
| 61209    | 15      |          |
| 62931    | 45      |          |

|   |  |              |    |  |  |     |      |         |   |   |  |                    |  |
|---|--|--------------|----|--|--|-----|------|---------|---|---|--|--------------------|--|
| D2944<br><br>Step Mounting Plate |  | Manufactured | No |  |  | 130 | Each | 15.0000 | 2 | 8 |  | <i>12.10.12.13</i> |  |
|---|--|--------------|----|--|--|-----|------|---------|---|---|--|--------------------|--|

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| WA       | 15      |          |
| 53725    | 2       |          |
| 64082    | 13      |          |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
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|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
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| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



# Picklist Print

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Page 2

Work Order ID: 64587

Parent Item: D350-591-133

Parent Item Name: Aft Maintenance Step

Start Date: 12/8/2010

Required Date: 12/14/2010

Start Qty: 4.00

Required Qty: 4.00

AN4-11A

Purchased

No

250

Each

324.0000

4

16



Bolt



10/12/22 SP

Location

Loc Qty

Loc Code

ST357

324

110382

124

115316

200

16

AN4-14A

Purchased

No

250

Each

15.0000

8

32



Bolt



11/16/19 10/12/22 SP

Location

Loc Qty

Loc Code

ST357

1

114752

1

ST358

14

110372

2

113359

12

AN4-16A

Purchased

No

250

Each

114.0000

8

32



Bolt



10/12/22 SP

Location

Loc Qty

Loc Code

ST360

114

115374

14

115422

100

32

AN4-7A

Purchased

No

250

Each

140.0000

2

8



Bolt



10/12/22 SP (40)

Location

Loc Qty

Loc Code

ST356

140

113226

90

115373

50

8

Wednesday, December 08, 2010 11:23:41 AM

Shop Packet Print

Page 2

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

Wednesday, December 08, 2010 11:23:41 AM

Page 3

Work Order ID: 64587

Parent Item: D350-591-133

Parent Item Name: Aft Maintenance Step

Start Date: 12/8/2010

Required Date: 12/14/2010

Start Qty: 4.00

Required Qty: 4.00

AN960JD416 NAS1149D0463J Purchased

No

250

Each

30.0000

14

56



Washer



M116289 10/12/22

Location

Loc Qty

Loc Code

ST300

24

113288

24

ST356

6

115622

6

D2230-1

Manufactured

No

250

Each

18.0000

4

16



Lug



B63319 10/12/22

Location

Loc Qty

Loc Code

ST476

18

62665

18

D2230-3

Manufactured

No

250

Each

2.0000

4

16



Lug



B63312 10/12/22

Location

Loc Qty

Loc Code

ST476

2

55452

2

D2732

Manufactured

No

250

f

89.9993

2

8



Rubber Extrusion



10/12/22

Location

Loc Qty

Loc Code

ST412

89.999279

56516

89.999279

cut (8) at 3.00"

→ Measure 8/10/12/22

g

Wednesday, December 08, 2010 11:23:41 AM

Shop Packet Print

Page 3

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

Wednesday, December 08, 2010 11:23:41 AM

Page 4

Work Order ID: 64587

Parent Item: D350-591-133

Parent Item Name: Aft Maintenance Step

Start Date: 12/8/2010

Required Date: 12/14/2010

Start Qty: 4.00

Required Qty: 4.00

D2856-400

Manufactured No

250 f

300.8530

1.26

5.04



Abraison Strip



10/12/22 SP

## Location

## Loc Qty

## Loc Code

ST403

300.8530421

56626

0.00004211

59920

84.853

63735

216

✓

(2X) 4.00" X 7.20" per dwg

D2945

Manufactured No -

250 Each

10.0000

1

4



Step Mounting Plate



10/12/22 SP

## Location

## Loc Qty

## Loc Code

ST031

10

55064

10

250 Each

4,700.000

14

56

MS21042L4



Nut



10/12/22 (40) SP

## Location

## Loc Qty

## Loc Code

ST300

4700

1123143

2

115589

98

115621

1100

116188

3500

56

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

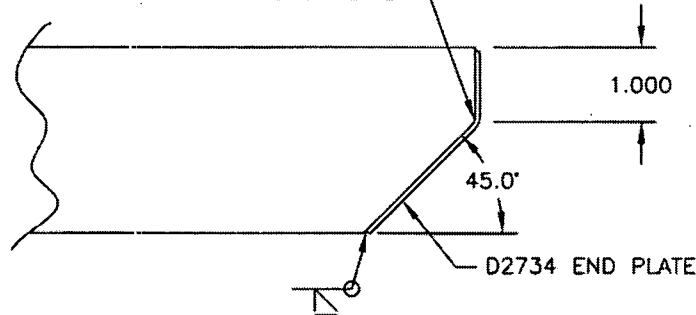
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

ROUND CORNER OF EXTRUSION TO  
MATCH BEND RADIUS OF END PLATE



TYPICAL STEP END DETAIL  
NOT TO SCALE

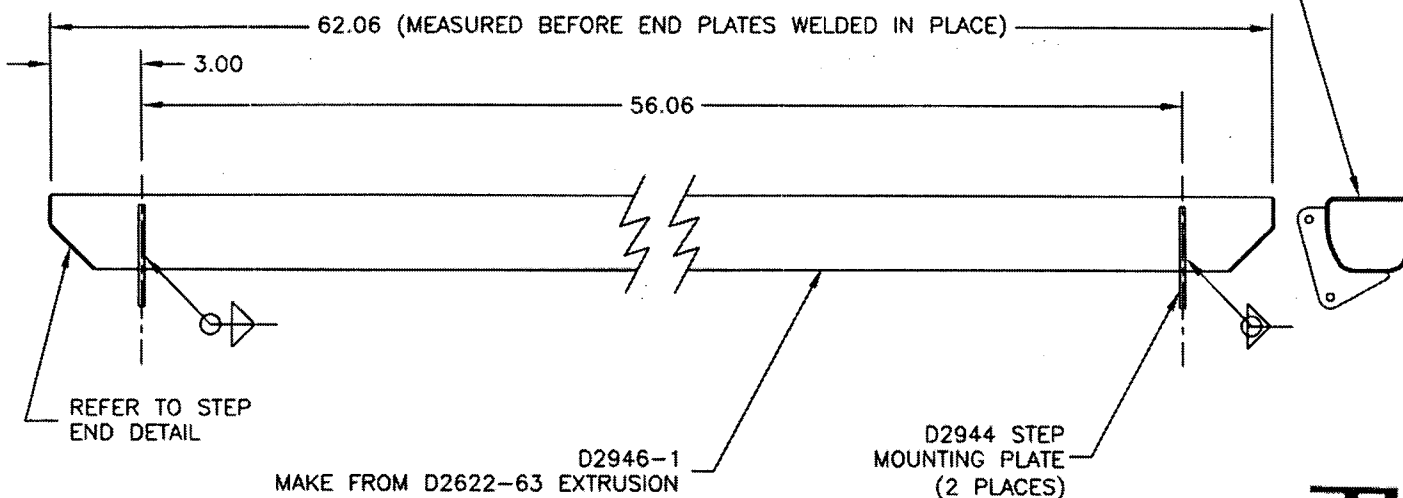
### D2946 STEP ASSEMBLY PARTS LIST

| Part No. | Description         | QTY |
|----------|---------------------|-----|
| D2946    | Step Assembly       | X   |
| D2622-63 | STEP EXTRUSION*     | 1   |
| D2734    | END PLATE           | 2   |
| D2944    | STEP MOUNTING PLATE | 2   |

\*cut per drawing

NOTE: ALL WELDS SHALL BE  
100% VISUALLY  
INSPECTED BY A  
QUALIFIED INSPECTOR  
PER DART QSI 004

APPLY BLACK ANTI-SKID  
ON TOP SURFACE TO  
BOTTOM OF TOP RADIUS



D2946-041 STEP ASSEMBLY

### D2946 STEP ASSEMBLY

- 1) MAKE FROM D2622 STEP EXTRUSION
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT ENTIRE ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

SHOP COPY

RETURN

ENGINEER

UNCONTROLLED COPY  
SUBJECT TO REWORK

WITHOUT  
WORK

NO.



212-28

| DESIGN  | CP       | DRAWN BY | PH | DART AEROSPACE LTD<br>HAMKESBURY, ONTARIO, CANADA | REV. B       |
|---------|----------|----------|----|---|--------------|
| CHECKED |          | APPROVED |    | DRAWING NO.<br>D2946                              | SHEET 1 OF 1 |
| DATE    | 05.11.14 |          |    | TITLE<br>STEP ASSEMBLY                            | SCALE<br>1:6 |
| A       |          | 99.12.13 |    | NEW ISSUE   |              |
| B       |          | 05.11.14 |    | UPDATE FINISHING NOTE                             |              |

RELEASED  
05.11.28

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



## 5. PARTS LIST

| Qty<br>-111A | Qty<br>-113 | Qty<br>-115 | Qty<br>-117A | Qty<br>-119 | Qty<br>-133 | Part Number   | Description                                       |
|--------------|-------------|-------------|--------------|-------------|-------------|---------------|---|
| X            |             |             |              |             |             | D350-591-111A | <i>Heli-Access-Step</i> ™, Long Step – High Skid  |
|              | X           |             |              |             |             | D350-591-113  | <i>Heli-Access-Step</i> ™, Short Step – High Skid |
|              |             | X           |              |             |             | D350-591-115  | <i>Heli-Access-Step</i> ™, Short Step – Low Skid  |
|              |             |             | X            |             |             | D350-591-117A | <i>Heli-Access-Step</i> ™, Pre-Flight Step        |
|              |             |             |              | X           |             | D350-591-119  | <i>Heli-Access-Step</i> ™, Long Step – Low Skid   |
|              |             |             |              |             | X           | D350-591-133  | <i>Heli-Access-Step</i> ™, Aft Maintenance Step   |
|              | 1           |             |              |             |             | D2310         | STEP ASSEMBLY (HIGH-SHORT)                        |
| 1            |             |             |              |             |             | D2311         | STEP ASSEMBLY (HIGH-LONG)                         |
|              |             | 1           |              |             |             | D2354         | STEP ASSEMBLY (LOW-SHORT)                         |
|              |             |             |              | 1           |             | D2355         | STEP ASSEMBLY (LOW-LONG)                          |
|              |             |             |              |             | 1           | D2946-041     | STEP ASSEMBLY (MAINTENANCE)                       |
| 4            | 2           | 2           | 2            | 2           |             | D2171         | CLAMP   |
| 4            | 2           | 2           | 2            | 2           |             | D2182B035     | CUSHION   |
|              |             |             |              |             | 4           | D2230-1       | MOUNTING LUG                                      |
|              |             |             |              |             | 4           | D2230-3       | MOUNTING LUG                                      |
| 8            | 4           | 4           | 4            | 4           |             | D2274         | RADIUS BLOCK                                      |
|              |             |             | 1            |             |             | D2362-041     | SUPPORT BRACKET                                   |
| 2            | 1           |             |              | 1           |             | D2362-3       | SUPPORT BRACKET                                   |
|              |             | 1           |              |             |             | D2362-5       | SUPPORT BRACKET                                   |
| 2            | 1           | 1           | 1            | 1           | 2           | D2856-400-720 | ABRASION STRIP                                    |
|              |             |             |              |             | 1           | D2945         | MOUNTING PLATE                                    |
| 2            | 2           | 2           |              | 2           |             | AN3-37A       | BOLT  |
|              |             |             |              |             | 2           | AN4-7A        | BOLT  |
|              |             |             |              |             | 4           | AN4-11A       | BOLT  |
|              |             |             |              |             | 8           | AN4-14A       | BOLT  |
|              |             | 4           |              |             |             | AN4-16A       | BOLT  |
| 8            | 4           |             |              | 4           |             | AN4-20A       | BOLT  |
| 1            | 1           | 1           | 4            | 1           |             | AN4-22A       | BOLT  |
| 4            | 4           | 4           |              | 4           |             | AN960JD10     | WASHER  |
| 10           | 6           | 2           | 4            | 6           | 14          | AN960JD416    | WASHER  |
|              |             | 4           |              |             |             | AN960JD416L   | WASHER  |
| 2            | 2           | 2           |              | 2           |             | MS21042L3     | NUT   |
| 9            | 5           | 5           | 4            | 5           | 14          | MS21042L4     | NUT   |

| Qty<br>-121 | Qty<br>-122 | Qty<br>-123 | Qty<br>-124 | Part Number   | Description   |
|-------------|-------------|-------------|-------------|---------------|---|
| X           |             |             |             | D350-591-121  | <i>Heli-Access-Step</i> ™, Short Step – High Skid, LH |
|             | X           |             |             | D350-591-122  | <i>Heli-Access-Step</i> ™, Short Step – High Skid, RH |
|             |             | X           |             | D350-591-123  | <i>Heli-Access-Step</i> ™, Short Step – Low Skid, LH  |
|             |             |             | X           | D350-591-124  | <i>Heli-Access-Step</i> ™, Short Step – Low Skid, RH  |
| 1           |             |             |             | D2351-041     | STEP ASSEMBLY (HIGH-SHORT, LH)                        |
|             | 1           |             |             | D2351-042     | STEP ASSEMBLY (HIGH-SHORT, RH)                        |
|             |             | 1           |             | D2356-041     | STEP ASSEMBLY (LOW-SHORT, LH)                         |
|             |             |             | 1           | D2356-042     | STEP ASSEMBLY (LOW-SHORT, RH)                         |
| 1           | 1           | 1           | 1           | D2230-1       | MOUNTING LUG  |
| 1           | 1           | 1           | 1           | D2230-3       | MOUNTING LUG  |
| 1           | 1           | 1           | 1           | D2856-400-720 | ABRASION STRIP  |
| 2           | 2           | 2           | 2           | AN3-37A       | BOLT  |
| 3           | 3           | 3           | 3           | AN4-13A       | BOLT  |
| 4           | 4           | 4           | 4           | AN960JD10     | WASHER  |
| 6           | 6           | 6           | 6           | AN960JD416    | WASHER  |
| 2           | 2           | 2           | 2           | MS21042L3     | NUT   |
| 3           | 3           | 3           | 3           | MS21042L4     | NUT   |

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Revision: G

Date: 08.10.06

# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G OR EARLIER  
AND  
INSTRUCTIONS OF CONTINUED AIRWORTHINESS ICA-D350-591 REV. 2 OR EARLIER

REF CANADIAN STC: SH92-6  
REF FAA STC: SH967NE

For D350-591-121/-122/-123/-124/-133 steps, customers have the option of installing D2732-030 cushions under the D2230-1/-3 clamps to accommodate varying crosstube diameters and to improve fit. It is also acceptable to use longer or shorter AN4 bolts, and/or extra AN960JD416 washers under the nut to ensure 1.5 to 4 threads in safety. See Figure 1 on sheet 2 of this service instruction for reference.

For D350-591-121/-122 steps at CHG 005, D350-591-123/-124 steps at CHG 004, and D350-591-133 steps at CHG 003, the parts list of D350-591 Rev. G and ICA-D350-591 Rev. 2 is amended as follows:

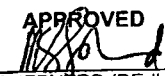
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




| Qty<br>-121 | Qty<br>-122 | Qty<br>-123 | Qty<br>-124 | Qty<br>-133 | Part Number  | Description   |
|-------------|-------------|-------------|-------------|-------------|--------------|---|
| X           |             |             |             |             | D350-591-121 | <i>Heli-Access-Step</i> ™, Short Step – High Skid, LH |
|             | X           |             |             |             | D350-591-122 | <i>Heli-Access-Step</i> ™, Short Step – High Skid, RH |
|             |             | X           |             |             | D350-591-123 | <i>Heli-Access-Step</i> ™, Short Step – Low Skid, LH  |
|             |             |             | X           |             | D350-591-124 | <i>Heli-Access-Step</i> ™, Short Step – Low Skid, RH  |
|             |             |             |             | X           | D350-591-133 | <i>Heli-Access-Step</i> ™, Aft Maintenance Step       |
| 2           | 2           | 2           | 2           | 8           | D2732-030    | CUSHION   |
| 2           | 2           | 2           | 2           | 8           | AN4-16A      | BOLT  |

The DSI-9459-011 kit is available for customers with earlier model D350-591-121/-122/-123/-124 steps. Longer AN4 bolts are provided to fasten the clamps. The DSI-9459-013 kit is available for customers with earlier model D350-591-133 steps.

| Qty<br>-011 | Qty<br>-013 | Part Number  | Description  |
|-------------|-------------|--------------|--|
| X           |             | DSI-9459-011 | Rubber Cushion Kit (for -121/-122/-123/-124 steps) |
|             | X           | DSI-9459-013 | Rubber Cushion Kit (for -133 steps)                |
| 2           | 8           | D2732-030    | CUSHION  |
| 2           | 8           | AN4-16A      | BOLT   |

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED  
BY:   
D. SHEPHERD (DE # 02)  
DATE: 09.06.24  
CERT. NO.: SH92-6  
ISSUE NO.: 11

|            |   |  |              |
|------------|---|--|--------------|
| B          | AN4-16A WAS -17A FOR -013/-133 KIT  | CP   | 09.06.24     |
| A          | NEW ISSUE   | CP   | 09.04.17     |
| REV.       | DESCRIPTION   | BY   | DATE         |
| DESIGN     |  | <b>DART AEROSPACE LTD</b>  |              |
| DRAWN      |  | HAWKESBURY, ONTARIO, CANADA  |              |
| CHECKED    |  | DRAWING NO.  | REV. B       |
| MFG. APPR. | N/A   | DSI 9459   | SHEET 1 OF 2 |
| APPROVED   |  | TITLE  | SCALE        |
| DE APPR.   |  | OPTIONAL CLAMP MODIFICATIONS   | NTS          |
| DATE       | 09.06.24  | <small>COPYRIGHT © 2009 BY DART AEROSPACE LTD<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |              |